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SPACE CENTER Roundup

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JSC prepares for 50th anniversary of National Engineers Week

Opportunities for gift giving, volunteering, and sharing time with friends and family abound during the holiday season. For some, the inclination to give extends to their professional lives.

Each year, hundreds of JSC employees commit their time and talents to our many calls for community outreach, but National Engineers Week (NEW) holds a special attraction for NASA. The special challenges posed by human space flight attract the best and brightest engineers. NEW is dedicated to making people aware of the effect engineering has on our lifestyle and to encouraging children with a scientific bent to consider engineering careers. Talk to some of the volunteers and you'll find that taking time to visit students rekindles their own fires as well.

Kelle Pido, International Partners lead for ISS Safety and Mission Assurance says volunteering "gets me out of the office and the humdrums of day-to-day work. I come back so much more motivated. When the kids are all excited you realize, 'Wow – I really have a cool job.' I come back a better employee than when I left."

Pido, a 10-year NEW volunteer, finds younger students present a greater challenge.

"Their questions are so off the wall!" says Pido. "I'll be talking about space and they come up with questions about why do insects have six legs and spiders 8. You never know what you are going to get."

Pido and other volunteers use creative demonstrations to keep children's attention.

"I always try to do something that is hands-on," says Pido. "I have a short attention span myself so I know how theirs must be. The more kinesthetic the activity, the more they tend to pay attention."

Spirit of giving attracts E-Week volunteers

Systems Engineering and Configuration Branch Chief Tracy Minish, another longtime NEW volunteer, agrees. He sometimes employs 'shock value' to get their attention.

"I bring hands-on activities with me," explained Minish.

"Whether it's a shuttle model to walk them through liftoff and the different phases of flight to

such as flight controllers or crew instructors. It's a big community that supports what they see on TV."

Volunteers also try to break down the students' fear of the tough classes needed to pursue technical degrees.

Minish tells them, "It's like training to run a marathon. You have to

train and prepare a little bit each day. Math is the same way – it builds up."

Engineers Week organizers expect more than 200 people to volunteer. Many of them, like Joel Altman, come back year

students with furrowed brows trying to figure out how to do this. People who are absorbed in solving problems make good engineers."

Seeing that flickering spark of interest is what keeps many Engineers Week volunteers coming back.

"It is a real boost to be able to do this," says Steve Rickman, deputy chief of the Thermal Branch in the Structures and Mechanics Division, who says he tries

to get involved however he can. "It's a fantastic experience. You can feed off of their enthusiasm. They take a genuine interest in what you do for a living."

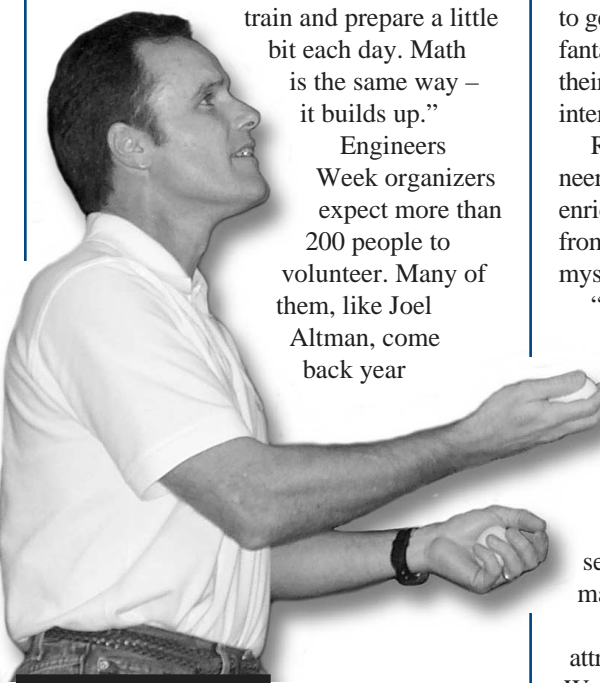
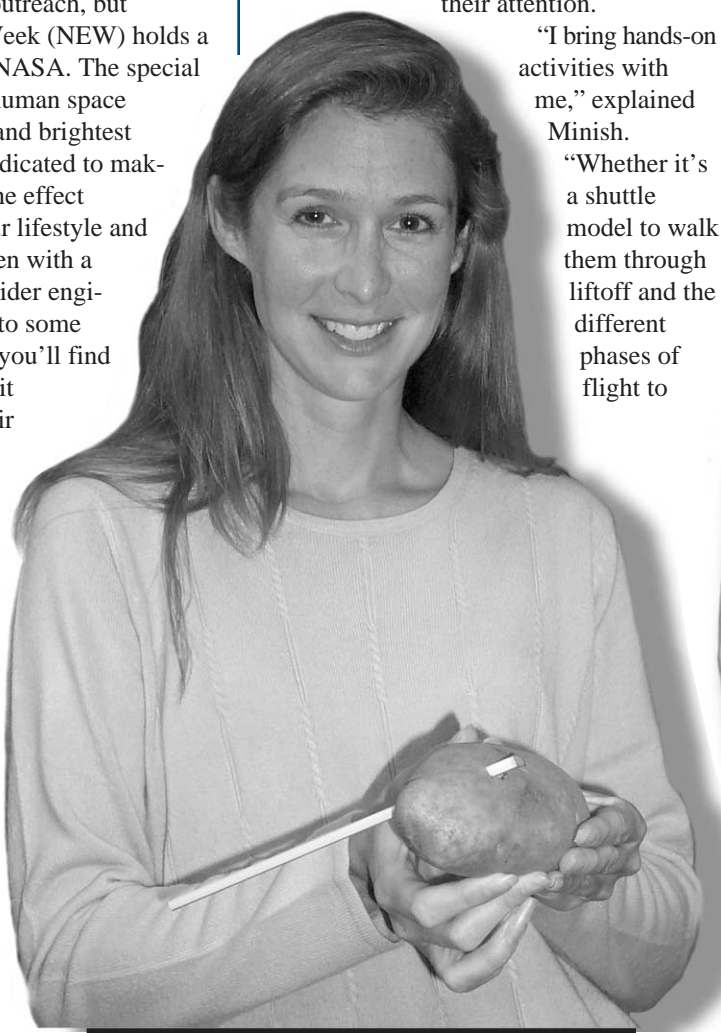
Rickman uses his time during Engineering Week to convey to students the enrichment and satisfaction that can come from pursuing your interests, such as the mysteries of math.

"The older I get, the more fascinated I am by mathematics and I try to share that," explained Rickman.

"With the high school students, I give them math challenges and try to leave them with something inspirational, like the story of Professor Andrew Wiles who dedicated seven years of his life to prove Fermat's Last Theorem."

There are several motivations that attract people to volunteer for Engineers Week but the common thread is the investment in our youth and the mentoring of our nation's future scientists and researchers.

"It's such a positive experience," says Rickman. "I believe the best legacies we can leave our children are an education and the benefit of our experiences."



Showing students the fun side of math and science is one of the ways National Engineers Week volunteers help attract young people to careers in engineering. Shown here, clockwise from left, are JSC volunteers Kelle Pido, Tracy Minish, and Joel Altman.

after year. Altman, an applications programmer with Lockheed Martin, wants to get more students involved with engineering.

Altman created an interactive exercise, using Tinker Toys and an intercom.

"I divide the class into two groups: astronauts and flight controllers. The flight controllers get a model Mars rover, while the astronauts get a box of parts."

After the astronauts construct their rover, from the flight controllers' verbal instructions, Altman gets the two groups together to compare the rovers.

"The most rewarding time," Altman says, "is seeing



My favorite part of doing this is just being with the kids and knowing something good happened here today.

– Kelle Pido

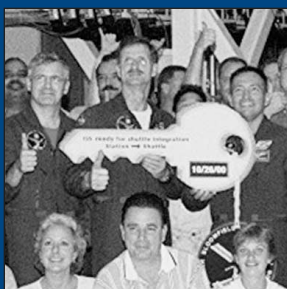
more interactive experiments, such as the Alka Seltzer rockets. You pretty much can get everyone's attention when you shoot off rockets in a classroom."

Minish says he ties in a bit of humor to his presentations to

"encourage more students to think about math and science."

"I try to show them what opportunities are out there," said Minish. "There are exciting jobs aside from being astronauts,

For more information on how you can be a part of JSC's commitment to National Engineers Week, visit <http://www4.jsc.nasa.gov/scripts/eweek/>.



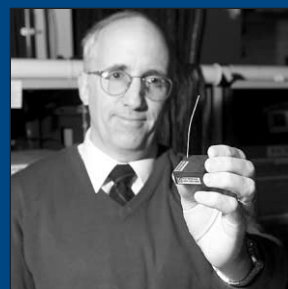
Key station element delivered to shuttle team.

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Latest NASA technology wows Inspection crowd.

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Wireless system reduces spacecraft load.

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